

ROLE AMBIGUITY AND ROLE PERFORMANCE EFFECTIVENESS: MODERATING THE EFFECT OF FEEDBACK SEEKING BEHAVIOUR

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ABSTRACT

The purpose of the present study is to understand the influence of a contextual factor (role ambiguity) and personal characteristics (feedback seeking behaviour) on role performance. As interdependent team based work has become an inherent characteristic of the workplace, role ambiguity while working is quite inherent in such organisations. By gaining better clarity regarding individual roles, employees can impact their role performance significantly. Data were collected from 176 employees of a large information technology organisation using survey technique by physically administering the questionnaire with the help of the Human Resource department in two phases; first from the employees and co-workers and finally from the supervisors. Subsequent data analysis was performed using hierarchical multiple regression. Results showed that feedback seeking both from a supervisor and co-workers ameliorated the effects of role ambiguity on role performance. Specifically, compared to feedback seeking from co-workers, feedback seeking from a supervisor was found to be more useful in reducing the effects of role ambiguity on role performance. This study draws from social cognitive theory and self-regulation theories, and implications are discussed for practicing managers in the IT industry.

Keywords: role ambiguity, role performance effectiveness, feedback seeking behaviour

INTRODUCTION

India has emerged as one of the fastest growing economies in recent years. The software development industry has been a significant contributor to this growth. The worth of the Indian software industry was US\$37.4 billion in 2006 and grew to US\$48 billion within a year (Ganesh & Gupta, 2010). Close to 200 of the Fortune 500 companies either have their centres based out of India or outsource their development to India (Moitra, 2001). Most of the Indian software organisations provide software solutions to their clients located in other countries, which involves a high degree of coordination, working in

interdependent teams and providing technical support. While most of the employees operate from their offsite locations (based in India), some employees work in the client locations (geographical locations other than India). This phenomenon calls for a greater need to use technology for seamless communication and coordination while working on different projects. Most of the time employees have to work in interdependent teams and in an uncertain work environment. Software organisations provide breeding grounds for employees to work in interdependent teams (Ganesh & Gupta, 2001). In fact, employees' ability to work in interdependent and uncertain work environments has been characteristic of modern day organisations (Griffin, Neal, & Parker, 2007). In such work contexts, individuals consciously seek feedback to ascertain the relevance of a specific work behaviour (Ashford & Cummings, 1983). It is quite understandable that the lack of clarity on deliverables from one's work (due to a high rate of interdependence and lack of clarity) can lead to ambiguity. Having better clarity on responsibilities and deliverables helps individuals perform better at work (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). Bray and Brawley (2000) found that an individual's ability to better understand how to perform the formal functions demanded by his or her role helped the employee to perform better at work. Gaining an understanding of one's responsibilities and accountabilities helps gain more effectiveness in a given role. Though past studies have examined feedback seeking behaviour (FSB) in relation to role ambiguity (Ashford & Cummings, 1985) and FSB in relation to performance (Taylor, Fisher, & Ilgen, 1984), none of these studies—to the best knowledge of the researchers—have examined their inter-relationship. Previous studies have been mostly conducted in western countries such as the United States. In contrast to western countries, India is a high power distance culture. Although evidence suggests that role perceptions, such as role ambiguity, do not vary as a function of cultural differences, such as power distance (Paine & Organ, 2000), it is plausible that their effects vary across cultures (McAllister, Kamdar, Morrison, & Turban, 2007). Surprisingly, though previous studies have focused extensively on role ambiguity and its correlates within generic roles (e.g., Berkowitz, 1980; Organ & Green, 1981) very few studies have examined role ambiguity within an interdependent team context (e.g., Bosselut, Heuzé, Eys, & Bouthier, 2010; Bosselut, Heuzé, & Sarrazin, 2010; Eys & Carron, 2001). Moreover, it is important to understand the factors that influence role performance from both individual and organisational perspectives. Ashford, Blatt and VandeWalle (2003) asked a similar question about feedback-seeking behaviour. The authors highlighted that past research that examined factors influencing feedback-seeking behaviour has failed to examine contextual factors. To quote, "Over the past 20 years, there have been sporadic calls to move beyond individual factors and focus on the context in which feedback-seeking takes place [...] Because of the relative lack of attention given to context factors thus far in the feedback-seeking literature, these represent an opportunity for future research" (pp. 783-784).

Given the pervasiveness of teams that can be characterised by task interdependence (e.g., software development teams in Information Technology (IT) companies), research aimed at studying the extent to which feedback seeking behaviour influences role ambiguity (work context) and role performance remains salient. Therefore, by bridging this gap, the main objective of the present paper is to empirically examine the moderating effect of feedback seeking behaviour on the relationship of role ambiguity and role performance effectiveness among Indian IT professionals.

LITERATURE REVIEW

Role Ambiguity

Classical role theory (Kahn et al., 1964) defined role ambiguity as the lack of information available to perform one's responsibilities effectively. Individuals experiencing role ambiguity lack adequate information about what their responsibilities are and insufficient information about the process to accomplish these responsibilities. First, the expectations need to be known, and secondly, knowledge of activities required to fulfil those expectations is also needed (Kahn et al., 1964). Role ambiguity can be understood in terms of the outcome expected from individuals and the clarity of the behavioural requirements that need to be fulfilled to meet those outcomes, such as which behaviours are considered to be appropriate (Rizzo, House, & Lirtzman, 1970). Role ambiguity is a lack of clarity regarding the expectations for one's role, the methods for fulfilling those expectations, and the consequences for effective or ineffective performance (Biddle, 1979; Van Sell, Brief, & Schuler, 1981). More recently, researchers (Yun, Takeuchi, & Liu, 2007; Burney & Widner, 2007; Marginson, 2006) have found role ambiguity to be associated with a lack of information on goals, conditions in which the job is to be performed, responsibilities, and duties to perform one's job effectively.

Role Performance Effectiveness

Role performance effectiveness indicates how effectively individuals perform in a given role (Bray & Brawley, 2000). Bray, Brawley and Carron (2001) found that an individual's belief in his or her own capabilities to perform effectively in a role influenced performance effectiveness. Understanding of one's role improves with time as individuals become exposed to the nuances involved in the job. As organisation tenure increases, an individual's tendency to seek feedback decreases (Ashford & Cummings, 1985). Ashford and Tsui (1991) found that feedback seeking was useful for effective job performance.

Role Ambiguity and Role Performance Effectiveness

Role ambiguity has been associated with anxiety (Katz & Kahn, 1978). Cohen (1959) found that ambiguously defined tasks with inconsistent guidance from supervisors results in anxiety and decreased productivity. Kahn et al. (1964) mentioned that ambiguity originates from complexities exceeding an individual's degree of comprehension and from the outcomes of changes associated with increased demands. Therefore, it is quite understandable that individuals experiencing role ambiguity will also face challenges in meeting performance expectations. Past research (Bauer & Green, 1994; Szilagyi, 1977 Williams, Podsakoff, & Huber, 1992; Sluss, van Dick, & Thompson, 2011) indicates that role ambiguity is detrimental employee performance. Rizzo et al. (1970) posit that role ambiguity should increase anxiety and dissatisfaction with one's role and ultimately lead to diminished performance. Similarly, other researchers (Fried, Ben-David, Tiegs, Avital, & Yeverechyahu, 1998) found that role ambiguity influenced supervisor rated performance and that those employees with high levels of role ambiguity were associated with lower levels of performance effectiveness. Fisher (2001) found that role ambiguity was negatively related to auditors' job performance, while Burney and Widener (2007) found that role ambiguity was negatively related to managerial performance in strategic planning and decision making areas.

Kahn et al. (1964) proposed that in situations characterised by a high level of task interdependency, role ambiguity should prove to be more dysfunctional. In other words, when the employees' responsibilities are closely linked to other co-workers, the impact of role ambiguity should be greater compared to that of employees whose work is largely independent. Role ambiguity is expected in interdependent teams, as seen in sports (Beauchamp, Bray, Eys, & Carron, 2001; Bray & Brawley, 2002) as well as in large scale product development companies, such as the automotive industry, and in the field of IT software and hardware (Ganesh & Gupta, 2010; Hoegl & Weinkauff, 2005). Recently, three studies (Bosselut et al., 2010a; Bosselut et al., 2010b, Eys & Carron, 2001) explored the relationship between group cohesion in athletes with varying perceptions of role ambiguity and found that role ambiguity was negatively associated with group cohesion. Similarly, Bosselut et al. (2010a) studied French rugby players and found that athletes who reported lower role ambiguity pertaining to responsibilities and behaviours reported higher levels of task cohesion. Bosselut et al. (2010b) found that role perceptions (i.e., clarity about the roles) were related to aspects of task cohesion and group integration. Finally, Eys and Carron (2001) reported that a lack of role clarity (i.e., high ambiguity) among basketball players was related to lower levels of task cohesiveness within the team. Therefore, it can be stated that perceptions of role ambiguity are an important

aspect to study in an interdependent work context when measuring role performance.

In their *role episode model*, Kahn et al. (1964) observed that, “Because interdependence is such dominant feature of organisations, the effects of change are difficult to contain...ambiguity in many parts of the organisation are almost inevitably the outcome” (pp. 76–77). Subsequent hypotheses within the role episode model were tested including perceptions of role ambiguity in relation to gender (e.g., Eys & Carron, 2001) and organisational factors (e.g., Eys, Carron, Beauchamp, & Bray, 2003). A similar qualitative study focusing on the subjective component of the role episode model highlighted the role ambiguity-cohesion relationship (Mellalieu & Juniper, 2006). Burney and Widener (2007) found that role ambiguity was an important intervening variable between job-relevant information and performance.

Previous studies (e.g., Fisher & Gitleson, 1983; Abramis, 1994; Jackson & Schuler, 1985) have found that role ambiguity is negatively related to performance. More recently, Yun et al. (2007) observed that role ambiguity is characterised by the absence of clear and specific performance targets, which leads employees to speculate and set their own goals. Rizzo et al. (1970) suggested that due to a lack of information on responsibilities or role expectations, individuals would engage in trial and error approaches to meet the expectations of their supervisors. Tubre and Collins (2000) established a negative relationship between role ambiguity and performance among individuals whose roles were characterised by a high level of task interdependence compared to individuals whose work was performed independently. When role ambiguity is high, there is sufficient room to interpret the job requirements, leading to varying standards of performance among similar group of individuals and, in turn, reduced performance (Sluss et al., 2011; Yun, Takeuchi and Liu, 2007; Burney and Widener, 2007; Marginson, 2006). Therefore, it can be hypothesised.

H1: Role ambiguity will be negatively related to role performance effectiveness

Feedback Seeking Behaviour (FSB)

Based on the strong foundation that feedback has a positive impact on individual and organisational performance (Ilgen, Fisher, & Taylor, 1979), Ashford and Cummings (1983) defined feedback seeking as a conscious, dedicated effort towards ascertaining the appropriateness and adequacy of the behaviours required for attaining specified end goals. These authors argued that individuals use two distinct forms of feedback to seek information about the environment: monitoring and inquiry. First, individuals using the covert technique monitor the environment by looking for specific situational cues, observing others and

examining how others are responding in order to infer (in a relative sense) how well they themselves are doing. Borrowing from social learning theory (Bandura, 1977), monitoring involves seeking feedback by observing how others have responded to situations. Inquiry, however, involves directly asking others about how they perceive and evaluate behaviour. For example, employees may choose to ask a number of sources for feedback as this approach will help to obtain different perspectives on their work. Schematic representation of the hypothesised model is presented in Figure 1.

Feedback Seeking As A Moderator

Feedback is most useful when it provides insights that help to enhance performance (Ashford & Cummings, 1983). Feedback provides information that can potentially help improve performance by specifying behaviours that are favourable and those that may not be seen as favourable for goal attainment. Feedback performs primarily two functions: behaviour reinforcement and behaviour regulation (Ashford, 1986). Feedback associated with favourable or expected work outcomes results in reinforcing behaviours, whereas feedback associated with unfavourable outcomes (e.g., poor performance) at work results in behaviour modification. By obtaining feedback, individuals can obtain an evaluation of their performance while confronting contingencies in the work environment. Rizzo et al. (1970) argued that as there is a lack of clarity of outcomes associated with one's behaviour when an individual faces role ambiguity, it is likely that the individual would rely on a trial and error method to match the expectations of his or her superiors.

Understanding the influence of context on feedback-seeking behaviour is crucial as contextual factors are more acquiescent to change compared to individual factors. The view that employees should manage their own performance is consistent with self-regulation theory, which emphasises an individual's ability to direct goal related activities and performance by setting his or her own standards and monitoring progress towards these standards (Vohs & Baumeister, 2004). Self-regulation theory has been applied in various work contexts, such as performance (Porath & Bateman, 2006), and in understanding the nature of managerial work (Ashford & Tsui, 1991; Tsui & Ashford, 1994). One of the key elements of self-regulation theory is feedback-seeking behaviour: individuals' proactive search for information regarding their own performance (Ashford & Tsui, 1991; Porath & Bateman, 2006). For instance, personality traits such as self-esteem and extraversion have been already shown to influence feedback-seeking behaviour (Krasman, 2010; Miller & Karakowsky, 2005; Roberson, Deitch, Brief, & Block, 2003). Therefore, to understand feedback-seeking behaviour, it is important to understand how work context (role ambiguity) plays a contributing role.

To cope with the anxiety associated with role ambiguity due to a lack of information on decision making authority (Rizzo et al., 1970) or due to job demands exceeding individual capabilities (Kahn et al., 1964), FSB could have the potential to reduce the likelihood of diverting cognitive resources away from task and instead focus on role performance. FSB helps individuals to remain focused on goals by seeking the appropriateness of actions taken (Ashford & Cummings, 1983). Feedback seeking may seem to be a more reactive approach that is dependent on others and arising out of evaluation apprehension and an inability to think for oneself. Ashford and colleagues (Grant & Ashford, 2008; Ashford & Cummings, 1983) and Parker and Collins (2010) have considered feedback seeking as a proactive strategy. They posit that individuals who are keen to take control of their destiny in the organisation use feedback-seeking as a strategy to respond to job demands (DeStrobbler et al., 2011). Ashford and Tsui (1991) argued for the importance of the role of active feedback seeking on managerial effectiveness. Indeed, feedback seeking from supervisors and co-workers is important, as distant or external sources might not be aware of the employee's desire for advice and guidance (Higgins & Kram, 2001) or supervisors may be apprehensive about their formal authority to provide feedback and consequently shirk from giving it (DeStrobbeler, Ashford, & Dirk, 2011). While managers could use feedback to encourage creative performance (Zhou, 2008), the above findings suggest that feedback seeking could be a valuable resource for employees to manage role ambiguity. Research shows that feedback seeking allows individuals to adapt and respond to changing work environments, varying goals, and role expectations (Tsui & Ashford, 1991; DeStrobbeler et al., 2011); to obtain accurate self-appraisal (Ashford & Tsui, 1991); and to improve task performance (Chen, Lam, & Zhong, 2007). When faced with role ambiguity, individuals could increase their direct feedback by monitoring their environment through indirect cues (Ashford & Tsui, 1991). Ashford and Cummings (1983) have suggested that individuals are active seekers of feedback. People who seek feedback are viewed positively by others (Ashford & Northcraft, 1992) especially when it comes to seeking feedback about negative events (Ashford & Tsui, 1991). The importance of seeking feedback proactively has been well demonstrated in research (Ashford & Cummings, 1983). Feedback, in this view, is seen as a strategy to achieve better person – environment fit. Ashford and Cummings (1983) described feedback seekers as being proactive individuals (e.g., Ilgen et al., 1979) who set their own standards and seek feedback to achieve personal goals and also to sustain relationships and to meet others' expectations. Individuals experiencing greater ambiguity in their job role are more likely to use FSB (Ashford & Cummings, 1985). For example, individuals could actively seek feedback to gain better control over the outcomes associated with their behaviour. Fried et al. (1998) found that role ambiguity characterised by a lack of information on how to prioritise and manage conflicting demands influenced performance adversely. In such situations, FSB could be helpful in clarifying

responsibilities and expected performance standards. Taylor, Fisher, and Ilgen (1984) stated that FSB brings clarity to the set of responsibilities, duties, and performance standards established by the organisation, thus leading to higher levels of job performance by reducing uncertainty about what feedback information is truly relevant to performance. In the context of person – environment fit, feedback seeking serves as an effective mechanism that facilitates performance effectiveness. An individual's attempt to enhance his or her performance through feedback focuses on the individual's ability to adapt to the varying organisational demands (Parker and Collins, 2010; Ashford and Black, 1996). Research shows that feedback seeking enables individuals to adapt themselves to changing goals and expectations (Tsui & Ashford, 1994) and to 'learn the ropes' of a new job (Ashford & Black, 1996). Morrison's (2002) model of employee information seeking suggests that feedback seeking reduces uncertainty within the job and, correspondingly, increases job knowledge, thereby developing positive work attitudes and performance. Taylor et al. (1984) stated that clear established standards were an important mitigating factor between feedback seeking and performance changes. In other words, due to a lack of information on their responsibilities or having no knowledge of how their performance will be evaluated, individuals would actively seek feedback to gain clarity on their role. Although research on feedback effectiveness is coloured with mixed results, positive results have nonetheless been associated with feedback on performance (Kluger & DeNisi, 1996).

Moreover, previous studies examining the feedback seeking and task performance relationship have failed to consider variations in performance due to different feedback sources (Whitaker, Dahling, & Levy, 2007). Failing to distinguish between the sources of feedback seeking (Morrison & Vancouver, 2000) may lead to a lack of attribution between FSB and performance. For example, an individual might find it uncomfortable to seek feedback from peers yet might seek sufficient feedback from a supervisor to gain knowledge about performance deliverables, evaluation criteria and authority for decision making in order to perform the role effectively. Accordingly, the present study proposes that the uncertainty effects of role ambiguity would be reduced through FSB. In work settings, FSB provides information regarding work performance and process. Williamson and Johnson (2000) found that feedback monitoring influenced increased agreement between self-rating and supervisor rating of performance. Thus, FSB helps gain a better understanding of performance expectations and actual performance. To this end, it is hypothesised:

- H2a: Feedback seeking behaviour using both inquiry and monitoring from supervisors will moderate the relationship between role ambiguity and role performance effectiveness

H2b: Feedback seeking behaviour using both inquiry and monitoring from co-workers will moderate the relationship between role ambiguity and role performance effectiveness

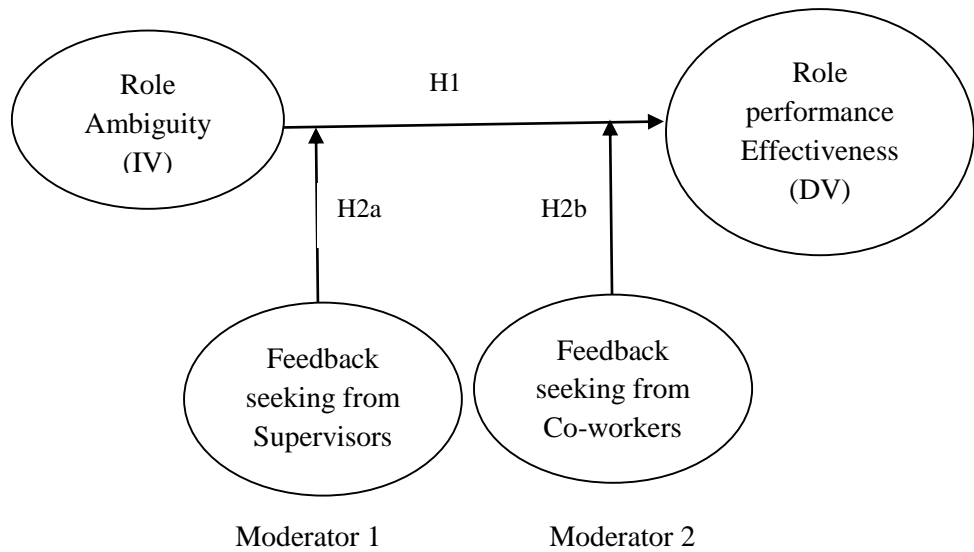


Figure 1. Schematic representation of the hypothesised model

METHODOLOGY

Research setting and procedure

The study was conducted in an Indian IT organisation with employees who worked on 38 software development project teams. The purpose of the study was explained to the Human Resources (HR) department of the company who later helped coordinate with the software development professionals for the data collection process. Survey method was used for data collection, and in most cases the questionnaire was administered to the participants face-to-face. Participation in the study was voluntary in nature. Team size ranged from five to fourteen members. As most of the software development teams were working on outsourced projects for clients located in different parts of the world, typically the majority of the team members were located in the same work location called the off-site location. Similarly, most of the teams had at least one member based at the client location to resolve customer queries, manage escalations and for coordination. These individuals are called on-site members. For on-site members

(located in the client location), the questionnaire was sent by e-mail (obtained from the HR department) in Microsoft Word format. On completion, these on-site members returned the questionnaires back to the researchers directly as an e-mail attachment. While administering the questionnaire, the purpose of the study was explained to the respondents (for off-site and on-site members), and they were assured complete confidentiality of their responses. Each questionnaire carried a serial number for identifying the respondents, and this number was known only to the respondents and the researcher.

Data collection was performed in two phases. During the first phase, demographic data, such as age, gender, and organisation tenure, and information on role ambiguity, were collected from the respondents directly. FSB from peers was collected from the co-workers during the first phase. At the end of the first phase, 208 usable questionnaires were obtained by the researchers of the 228 that were originally distributed (91% response rate). During the second phase, data on FSB from supervisors, job involvement and role performance were collected from the respondents' reporting managers. The final set consisted of 176 completed questionnaires obtained from the employees' supervisors (77% response rate), which included 22 on-site members who sent completed questionnaires. The mean age of the sample was 32.39 years ($SD = 5.56$), and the mean organisation tenure was 5.51 years ($SD = 2.88$). Women represented 43% of the population, with an average age lower than that of their male counterparts.

Control Variables

Job involvement has been shown to impact job attitudes and behaviours (Saleh and Hosek, 1976; Ashford and Cummings, 1985). Kahn et al. (1964) found that increased levels of role ambiguity and role conflict were related to lower levels of job satisfaction and job participation. Ashford and Cummings (1985) found that FSB was associated with job involvement and, consequently, the present study controls for the same factors.

Organisation tenure influences FSB, as increasing tenure is associated with a decreased need to seek feedback from others (Ashford & Cummings, 1985). Consequently, the present study controls for organisation tenure.

Measures

Table 1
Details of measures used for the variables in the study

Variable Name	Variable Type	Source of Scale	No. of items	Response Type	Cronbach α
Role ambiguity	Independent Variable (IV)	Rizzo, House, & Lirtzman (1970)	6	Five point ranging from "strongly disagree" to "strongly agree"	0.74
Role performance effectiveness	Dependent Variable (DV)	William & Anderson (1991)	7	Five point ranging from "never" to "very frequently"	0.78
Feedback seeking behavior from supervisor	Moderator 1	Callister, Kramer, & Turban (1999)	3	Five point ranging from "never" to "very frequently"	0.84
Feedback seeking behavior from peers	Moderator 2	Callister, Kramer, & Turban (1999)	4	Five point ranging from "never" to "very frequently"	0.87
Job involvement	Control variable	Lodhal & Kejner (1965)	6	Five point ranging from "strongly disagree" to "strongly agree"	0.84
Organization tenure	Control variable	Ashford & Cummings (1985)	1	Tenure (in months)	Not applicable

RESULTS

The study used hierarchical multiple regression to test the hypotheses by entering the control variables first, the main effect variables second, and the interaction term last. The interaction term was formed by transforming the raw scores of the causal and moderator variables into deviation scores with the means equal to zero. Such transformation eliminates problems of multicollinearity with the interaction term due to scaling (Aiken & West, 1991).

To examine the internal structure and convergence validity of role ambiguity, feedback seeking from supervisors, feedback seeking from co-workers and role performance were subjected to an exploratory factor analysis using Kaiser-

Meyer-Olkin (KMO) criterion with Barlett’s Test of Sphericity and a “varimax” rotation using principal components. Four factors emerged with an adjusted goodness-of-fit index (GFI) of 0.92 and a root-mean-square residual (RMSR) of 0.04 and with loadings ranging from 0.45 to 0.75.

Table 2
Descriptive statistics: means, standard deviations, and correlations

Variable	Means	SD	1	2	3	4	5	6	7
1. Gender ^a	0.56	0.49	-						
2. Tenure ^b	0.68	0.22	0.29**	-					
3. Job involvement	21.43	3.60	0.12	0.09	-				
4. Role ambiguity	16.72	3.28	-0.10	-0.15*	-0.16*	-			
5. FSB from supervisor	17.36	2.54	0.17*	-0.15	0.37**	-	-		
6. FSB from co-worker	20.55	5.68	0.18*	0.23**	0.32**	-	0.43**	-	
7. Role performance	22.85	3.76	0.18*	0.17*	0.44**	-	0.63**	0.75**	-

Notes: a code 0 = female, 1 = male; b natural logarithm; FSB = Feedback seeking behavior
* $p < 0.05$, ** $p < 0.01$, $n = 176$

Table 2 presents the means, standard deviations, and inter correlations of the variables. On average, respondents reported experiencing a level of role ambiguity of 3.34, FSB from supervisor of 4.33, FSB from co-workers of 2.93 and role performance of 3.81 (measured on a five-point scale). Organisation tenure was positively related to role ambiguity ($r = -0.15$, $p < 0.05$), directly related to role performance ($r = 0.17$, $p < 0.05$) and related to FSB from co-workers ($r = 0.23$, $p < 0.01$). Job involvement was positively related to FSB from supervisors ($r = 0.37$, $p < 0.01$) and FSB from co-workers ($r = 0.32$, $p < 0.01$); both results are consistent with earlier research performed by Ashford and Cummings (1985). Role ambiguity was negatively and significantly related to role performance ($r = -0.54$, $p < 0.01$), negatively and significantly related to FSB from co-workers ($r = -0.62$, $p < 0.01$) and also negatively and significantly related to FSB from supervisors ($r = -0.27$, $p < 0.01$). FSB from co-workers was positively and significantly related to FSB from supervisors ($r = 0.43$, $p < 0.01$), which is consistent with the findings of Whitaker et al. (2007). FSB from supervisors was positively and significantly related to role performance ($r = 0.63$, $p < 0.01$), and FSB from co-workers was also positively and significantly related to role performance ($r = 0.75$, $p < 0.01$). These findings are consistent with the results reported by Whitaker et al. (2007).

The effects of role ambiguity and feedback seeking behaviour from supervisors and co-workers on role performance variables are represented in Table 3 and Table 4.

Table 3
Hierarchical regression results for the effects of role ambiguity and feedback seeking behaviour from supervisors on role performance

Variable	Model 1		Model 2		Model 3	
	β	SE	β	SE	β	SE
Step 1: Control variables						
Gender	0.10	0.54	-0.06	0.39	-0.02	0.37
Tenure	0.12*	0.09	0.17**	0.89	0.11*	0.92
Job Involvement	0.42**	0.07	0.18**	0.06	0.17**	0.05
Step 2: Main effects						
Role ambiguity			-0.35***	0.06	-0.35***	0.06
FSB from supervisor			0.49***	0.08	0.54***	0.08
Step 3: Interaction effect						
Role ambiguity x FSB from supervisor					-0.19***	0.18
F	15.86		52.89		49.41	
R ²	0.20***		0.60***		0.64***	
Δ in R ²	0.40***				0.04**	

Notes: a code 0 = female, 1 = male; b natural logarithm; FSB = feedback seeking behavior
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, $n = 176$

H1 predicted that role ambiguity would negatively influence role performance. Multiple regression analysis testing a main effects model yielded a significant and negative regression of role ambiguity and role performance ($\beta = -0.35$, $p < 0.001$) in the case of FSB from supervisors and ($\beta = -0.11$, $p < 0.05$) in the case of FSB from co-workers, suggesting support for the hypothesis under both moderating conditions.

H2a predicted that FSB from supervisors (through inquiry and monitoring) would moderate the relationship between role ambiguity and role performance, and H2b stated that FSB from co-workers (through inquiry and monitoring) would moderate the relationship between role ambiguity and role performance. As

shown in model 3 (Table 3), a significant interaction exists between FSB from supervisors and role ambiguity ($\beta = -0.19, p < 0.001$), and the explained variance in the model is due to main effects ($\Delta R^2 = 0.04, p < 0.001$). Similarly, the interaction term between FSB from co-workers and role ambiguity shown in model 3 (Table 4) is significant and positive ($\beta = -0.15, p < 0.01$), and the explained variance in the model is due to effects beyond those due to main effects ($\Delta R^2 = 0.02, p < 0.01$). Thus, *H2a* and *H2b* are supported. Simple slope analysis was performed (Aiken and West, 1991) taking into consideration high (one standard deviation above the mean) and low (one standard deviation below the mean) levels of the moderator.

Table 4
Hierarchical regression results for the effects of role ambiguity and feedback seeking behaviour from co-workers on role performance

Variable	Model 1		Model 2		Model 3	
	β	SE	β	SE	β	SE
Step 1: Control variables						
Gender	0.10	0.54	0.04	0.38	0.05	0.37
Tenure	0.12	0.09	-0.02	0.85	-0.07	0.88
Job Involvement	0.42***	0.07	0.22**	0.05	0.21***	0.05
Step 2: Main effects						
Role ambiguity			-0.14*	0.07	-0.11*	0.07
FSB from co-worker			0.60***	0.04	0.60***	0.04
Step 3: Interaction effect						
Role ambiguity x FSB from co-worker					-0.15**	0.16
F	15.87		55.39		49.43	
R ²	0.22***		0.62***		0.64**	
Δ in R ²	0.40***				0.02**	

Notes: a code 0 = female, 1 = male; b natural logarithm; FSB = feedback seeking behaviour
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, $n = 176$

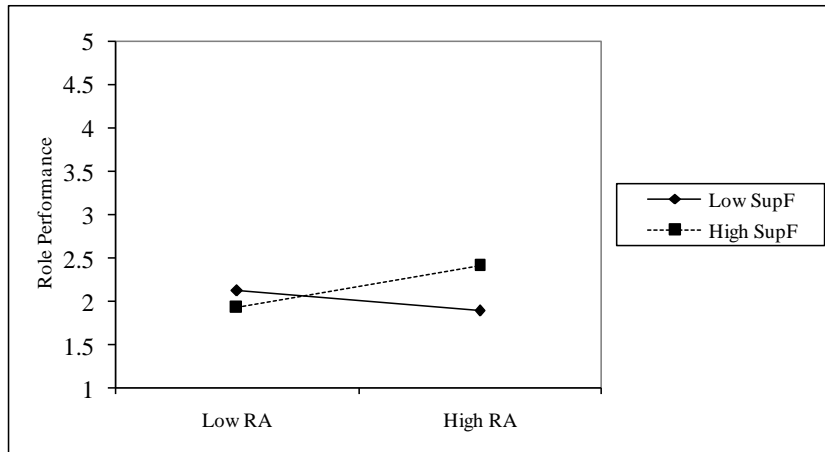


Figure 2. Relationship between role ambiguity and role performance at high and low levels of feedback seeking behaviour from supervisors

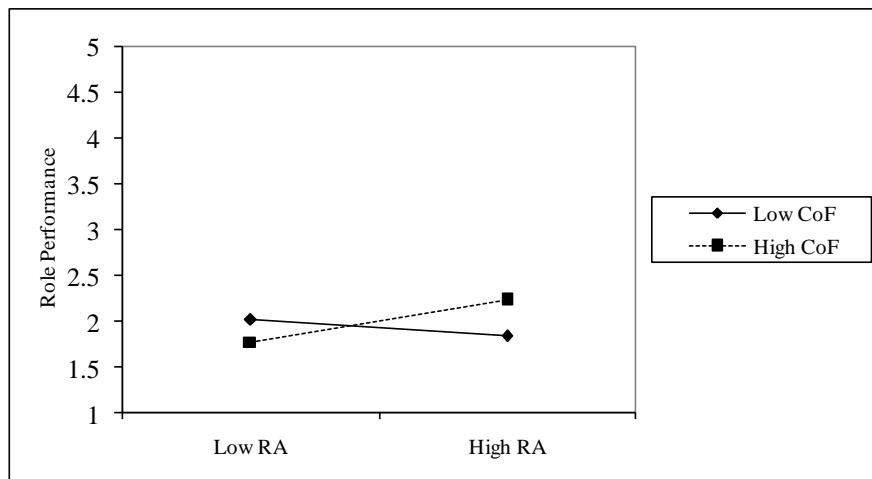


Figure 3. Relationship between role ambiguity and role performance at high and low levels of feedback seeking behaviour from co-workers

Post hoc analysis showed that for those employees with high feedback seeking behaviour from supervisors, role ambiguity was negatively related to role performance ($\beta = -0.72$, $t = -8.99$, $p < 0.001$), whereas for those with low feedback seeking behaviour from supervisors, role ambiguity was not related to role performance ($\beta = -0.13$, $t = -0.82$, $p > 0.05$). For those employees with high feedback seeking behaviour from co-workers, role ambiguity was negatively related to role performance ($\beta = -0.45$, $t = -2.51$, $p < 0.05$), whereas for those

employees with low feedback seeking behaviour from co-workers, role ambiguity was not related to role performance ($\beta = -0.18, t = -0.97, p > 0.05$). These results provided support for both H2a and H2b. The differences in the slopes obtained in both cases also indicate that feedback seeking from supervisors is found to reduce role ambiguity and enhance role performance more compared to feedback seeking from co-workers.

DISCUSSION

Understanding the factors that affect role performance is important for organisations seeking to develop a competent workforce. Though FSB has been studied in relation to role ambiguity (Ashford & Cummings, 1985) and in relation to performance (Taylor et al., 1984), none of the studies have examined their inter-relationship. Specifically, the present study focused on the effects of FSB and role ambiguity on role performance. Role ambiguity was found to negatively influence role performance. Organisation tenure was positively related to role performance, indicating that with increasing tenure, role ambiguity decreases. Similarly, organisation tenure was negatively related to role ambiguity, indicating that with increasing tenure, role ambiguity decreased. Individuals who were more involved with their jobs and who felt a sense of personal identity and competence also engaged in FSB more often. Such individuals used FSB to master the tasks defined in their scope of responsibilities to achieve their desired role performance. The study also empirically examined the moderating role that FSB played in ameliorating the effects of role ambiguity. The findings indicated that FSB moderated the negative effects of role ambiguity on role performance. FSB from supervisors and co-workers was negatively related to role ambiguity and positively related to role performance. Perceptions of ambiguity in a given role were related to seeking feedback from supervisors and co-workers to obtain a better understanding of performance evaluation or advancement criteria. This sentence suggests that in an organisation where individual roles are ambiguously defined, strong FSB from supervisors and co-workers would improve role performance. It is quite understandable that in any organisation, defining individual deliverables to the minutest detail might be impractical; however, FSB from supervisors and co-workers could legitimise behaviours that would be more acceptable for desirable role performance. Though a significant correlation exists between FSB from supervisors and co-workers, FSB from supervisors was seen to impact role performance to a greater extent compared to FSB from co-workers. This difference could be attributed to role performance being evaluated by the supervisors themselves.

LIMITATION AND DIRECTIONS FOR FUTURE RESEARCH

The present study has certain strengths. To avoid common method variance, the present study collected data from three different sources, viz. the employee, peers and the supervisor. It is quite plausible that individuals might attribute their poor role performance to role ambiguity; therefore, data on job involvement and role performance were collected from the respondents' supervisors. Similarly, their FSB from co-workers was directly collected from their colleagues who were part of the same project team as the respondent. Though the moderating role of FSB in reducing effects of role ambiguity on role performance was established, results should be viewed in light of certain limitations. First, the cross-sectional nature of the study limits the ability to draw any causal relationships concerning various hypothesised relations. Future research could incorporate longitudinal design to capture how FSB varies across a period of time, e.g., FSB may be more important (value of feedback) to individuals during their early stages of organisation entry compared to tenured individuals, as feedback as a valuable resource depends on its utility value (Ashford, 1986). Whether or not individuals opt for FSB to reduce the uncertainty that stems from a lack of information on performance evaluation or performance goals could also depend on tolerance to ambiguity (Ashford & Cummings, 1985). Therefore, future studies can study the impact of tolerance on ambiguity and FSB on role performance.

Second, data for the present study were collected from a single organisation; hence, the results cannot be generalised. Though the present data suggest that FSB moderates the relationship between role ambiguity and role performance, future research could consider other variables such as value of feedback, effort in feedback seeking, perceived competence and frequency of feedback through monitoring and inquiry. For example, individuals with high perceived competence are less likely to seek feedback even when their roles are ambiguously defined. This would in turn influence the effort in seeking feedback. Similarly, the value of feedback would influence effort in seeking feedback. It is also expected that individuals with high perceived competence would be more tolerant to role ambiguity.

Third, role performance could itself influence FSB by increasing perceived competence. Therefore, as an extension of this paper, a study involving how the indicators of FSB influence role ambiguity within multiple organisational contexts should be reviewed to better understand how role ambiguity can impact role performance.

THEORETICAL IMPLICATIONS

Though previous studies on FSB have studied this phenomenon in relation to role ambiguity (Ashford & Cummings, 1985) and in relation to performance (Taylor et al., 1984), none of these studies have examined their inter-relationship. Therefore, the present study adds to the existing body of knowledge by examining the moderating role of FSB in the relationship between role ambiguity and role performance. For instance, a high level of role ambiguity related to low performance indicates that the subject lacks relevant job knowledge and skills, knowledge of job associated goals, and knowledge of the functional behaviours required to accomplish these goals (e.g., Tubre & Collins, 2000). The reason for this outcome, according to social cognitive theory, is that perceived mastery influences individual beliefs about their own efforts in producing favourable outcomes (Bandura, 2001), such as supervisory rated performance. In other words, individuals would avoid engaging in activities in which they lack the knowledge and skills or where they expect unfavourable outcomes. Similarly, borrowing from self-regulation theory (Carver & Scheier, 1982, 1998), the present study provides insights into the process by which feedback-seeking behaviour is manifested in ambiguous role contexts. Accordingly, the present study combines both social cognitive theory (Bandura, 2001) and self-regulation theory (Carver & Scheier, 1982, 1998).

IMPLICATIONS FOR PRACTITIONERS

One managerial implication of the findings of this study is related to the factors that influence role performance. Organisations that want their employees to achieve better role performance must define the role clearly and provide the appropriate environment for employees to seek feedback. Seeking feedback becomes crucial provided that it helps individuals meet their expected objectives. Individuals could seek feedback in order to master tasks to be performed regardless of whether those jobs are an initial or later part of their organisation tenure (Ashford, 1986). As situations become more predictable and ambiguity in the role diminishes, the need for soliciting feedback lessens. FSB from a supervisor is important in order to gain clarity on responsibilities as a part of the role and is seen as positively influencing role performance. Supervisors can establish better team work by checking periodically whether the subordinates are clear about the individual and/or collective objectives and goals and by gauging the level of understanding of those goals (Ganesh & Gupta, 2010). Managers can keep an open feedback process to reduce the risks associated with the evaluation apprehension of their subordinates. In such situations, subordinates would use FSB from supervisors to understand their own strengths and weaknesses. Open

feedback forums will allow subordinates to obtain accurate and objective appraisals of their performance. Selecting the right individuals is crucial for ensuring team success. One way to ensure this success could be to select individuals who either have prior exposure in working with cross functional teams or who have already worked together. Supervisors need to ensure that team members are clear about their goals, roles and responsibilities by providing detailed and prompt feedback within the team (Piccoli, Powell, & Ives, 2004). As discussed earlier, working in an interdependent and uncertain work environment is characteristic of modern day IT organisations, and role ambiguity seems unavoidable. However, through effective feedback-seeking strategies from co-workers and supervisors, the negative effects of role ambiguity on role performance can definitely be minimised, if not eliminated. Nevertheless, managers also need to be more cautious of their own actions as employees could use it for feedback interpretation. For example, employees could either use inquiry or monitoring to infer their performance. Managers need to be aware that their behaviours also signal to employees to interpret acceptable and unacceptable performance. A greater level of awareness will allow managers to provide feedback that is consistent with employees' expected role behaviours.

REFERENCES

- Abramis, D. J. (1994). Work role ambiguity, job satisfaction, and job performance: Meta-analysis and review. *Psychological Reports, 75*, 1411–1433.
- Aiken, L., & West, S. (1991). *Multiple regressions: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Ashford, S. J. (1986). Feedback-seeking in individual adaptation: A resource perspective. *Academy of Management Journal, 29*(2), 465–487.
- Ashford, S. J., & Black, J. S. (1996). Proactivity during organizational entry: The role for desire for control. *Journal of Applied Psychology, 81*(2), 199–214.
- Ashford, S. J., & Cummings, L. L. (1983). Feedback as an individual resource: Personal strategies of creating information. *Organizational Behavior and Human Performance, 32*(3), 370–389.
- Ashford, S. J., & Cummings, L. L. (1985). Proactive feedback seeking: The instrumental use of the information environment. *Journal of occupational psychology, 58*(1), 67–79.
- Ashford, S. J., & Northcraft, G. (1992). Conveying more (or less) than we realize: The role of impression-management in feedback-seeking. *Organizational Behavior and Human Decision Processes, 53*(3), 310-334.
- Ashford, S. J., & Tsui, A. S. (1991). Self regulation for managerial effectiveness: The role of active feedback seeking. *Academy of Management Journal, 91*(34), 251–280.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. In S. Fiske, D. Schacter, & C. Zahn-Waxler (Eds.), *Annual review of psychology, 52*, 1–26.

- Bauer, T. N., & Green, S. G. (1994). Effect of newcomer involvement in work-related activities: A longitudinal study of socialization. *Journal of Applied Psychology, 79*(2), 211–223.
- Beauchamp, M. R., Bray, S. R., Eys, M. A., & Carron, A. V. (2002). Role ambiguity, role efficacy and role performance: Multidimensional and meditational relationship within interdependent sport teams. *Group Dynamics, 6*(3), 229–242.
- Berkowitz, E. N. (1980). Role theory, attitudinal constructs, and actual performance: A measurement issue. *Journal of Applied Psychology, 65*(2), 240–245.
- Biddle, B. J. (1979). *Role theory: Expectations, identities, and behaviors*. New York: Academic Press.
- Bosselut, G., Heuzé, J. P., Eys, M. A., & Bouthier, D. (2010a). Influence of task cohesion and role ambiguity on cognitive anxiety during a European rugby union championship. *Athletic Insight, 2*, 17–34.
- Bosselut, G., Heuzé, J. P., & Sarrazin, P. (2010b). Structure of the role ambiguity framework and validity in the French culture. *Psychology of Sport and Exercise, 11*, 471–478.
- Bray, S. R., & Brawley, L. R. (2002). Role efficacy, role clarity and role performance effectiveness. *Small Group Research, 33*(3), 233–253.
- Burney, L., & Widener, S. K. (2007). Strategic performance measurement systems, job-relevant information, and managerial behavioural responses – role stress and performance. *Behavioral Research in Accounting 19*(1), 43–69.
- Callister, R. R., Kramer, M. W., & Turban, D. B. (1999). Feedback seeking following career transitions. *Academy of Management Journal, 42*(4), 429–438.
- Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. New York: Cambridge University Press.
- Carver, C. S., & Scheier, M. F. (1982). Control theory: A useful conceptual framework for personality–social, clinical, and health psychology. *Psychological Bulletin, 92*, 111–135.
- Eys, M. A., & Carron, A. V. (2001). Role ambiguity, task cohesion, and task self-efficacy. *Small Group Research, 32*, 356–373.
- Eys, M. A., Carron, A. V., Beauchamp, M. R., & Bray, S. R. (2003). Role ambiguity in sport teams. *Journal of Sport & Exercise Psychology, 25*, 534–550.
- Fisher, R. T. (2001). Role stress, the type A behaviour pattern and external auditor job satisfaction and performance. *Behavioral Research in Accounting, 13*(1), 143–170.
- Fisher, C. D., & Gitelson, R. (1983). A meta-analysis of the correlates of role conflict and ambiguity. *Journal of Applied Psychology, 68*(2), 320–333.
- Fried, Y., Ben-David, H. A., Tiegs, R. B., Avital, N., & Yeverechyahu, U. (1998). The interactive effect of role conflict and role ambiguity on job performance. *Journal of Occupational and Organizational Psychology, 71*(1), 19–27.
- Ganesh, M. P., & Gupta, M. (2010). Impact of virtualness and task interdependence on extra-role performance in software development teams. *Team Performance Management, 16*(3/4), 169–186.
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. In A. P. Brief & B. M. Staw (Eds.), *Research in Organizational Behavior* (Vol. 28, 3–34). Greenwich, CT: JAI.

- Griffin, M. A., Neal, A., & Parker, S. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, 50(2), 327–347.
- Hoegl, M., & Weinkauff, K. (2005). Managing task interdependencies in multi team projects: A longitudinal study, *Journal of Management Studies*, 42(6), 1287–1308.
- Ilgen, D. R., Fisher, C. D., & Taylor, S. M. (1979). Consequences of individual feedback on behavior in organizations. *Journal of Applied Psychology*, 64(4), 349–371.
- Jackson, S. E., & Schuler, R. S. (1985). A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. *Organizational Behavior and Human Decision Processes*, 36(1), 16–78.
- Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational stress*. New York: Wiley.
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (2nd ed.). New York: John Wiley.
- Kluger, A., & DeNisi, A. (1996). Effects of feedback intervention on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin*, 119(2), 254–284.
- Krasman, J. (2010). The feedback-seeking personality: Big five and feedback-seeking behavior. *Journal of Leadership and Organization Studies*, 17(1), 18–32.
- Lodhal, T. M., & Kejner, M. (1965). The definition and measurement of job involvement. *Journal of Applied Psychology*, 49(1), 24–33.
- Marginson, D. 2006. Information processing and management control: a note exploring the role played by information media in reducing role ambiguity. *Management Accounting Research*, 17(2), 187–197.
- McAllister, D. J., Kamdar, D., Morrison, E. W., & Turban, D. B. (2007). Disentangling role perceptions: How perceived role breadth, discretion, instrumentality, and efficacy relate to helping and taking charge. *Journal of Applied Psychology*, 92(5), 1200–1211.
- Mellalieu, S. D., & Juniper, S. W. (2006). A qualitative investigation into experiences of the role episode in soccer. *The Sport Psychologist*, 20, 399–418.
- Miller, D., & Karakowsky, L. (2005). Gender influences as an impediment to knowledge sharing: When men and women fail to seek peer feedback, *Journal of Psychology*, 139(2), 101–118.
- Moitra, D. (2001). India's software industry, *IEEE Software*, 18(1), 77–80.
- Morrison, E. (2002). Newcomers' relationships: The role of social network ties during socialization. *Academy of Management Journal*, 45(5), 1149–1160.
- Morrison, E., & Vancouver, J. (2000). Within-person analysis of information seeking: The effects of perceived costs and benefits. *Journal of Management*, 26(1), 119–137.
- Organ, D. W., & Green, C. N. (1981). The effects of formalization on professional involvement: A compensatory process approach. *Administrative Science Quarterly*, 26(2), 237–252.
- Paine, J. B., & Organ, D. W. (2000). The cultural matrix of organizational citizenship behavior: Some preliminary conceptual and empirical observations. *Human Resource Management Review*, 10(1), 45–59.

- Parker, S. K., & Collins, C. G. (2010). Taking stock: Integrating and differentiating multiple proactive behaviors. *Journal of Management*, 36(3), 633–662.
- Piccoli, G., Powell, A., & Ives, B. (2004). Virtual teams: Team control structure, work processes, and team effectiveness. *Information Technology & People*, 17(4), 359–379.
- Porath, C. L., & Bateman, T. S. (2006). Self-regulation: From goal orientation to job performance. *Journal of Applied Psychology*, 91, 185–192.
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and role ambiguity in complex organization. *Administrative Science Quarterly*, 15(2), 150–163.
- Roberson, L., Deitch, E., Brief, A., & Block, C. (2003). Stereotype threat and feedback seeking in the workplace. *Journal of Vocational Behaviour*, 62, 176–88.
- Saleh, S. D., & Hosek, J. (1976). Job involvement: Concepts and measurements. *Academy of Management Journal*, 19(2), 213–224.
- Sluss, D. M., van Dick, R., & Thompson, B. S. (2011). Role theory in organizations: A relational perspective. In Zedeck, S. (ed.), *APA Handbook of Industrial and Organizational Psychology*, (Volume 1, Building and Developing an Organization, pp. 505–534). Washington DC: American Psychological Association.
- Szilagyi, A. D. (1977). An empirical test of causal inference between role perceptions, satisfaction with work, performance and organization level. *Personnel Psychology*, 30(3), 375–388.
- Taylor, M., Fisher, C., & Ilgen, D. (1984). Individuals' reactions to performance feedback in organizations: A control theory perspective. In K. Rowland & J. Ferris (Eds.), *Research in Personnel and Human Resource Management*, 2, 91–124. Greenwich, CT: JAI.
- Tsui, A. S., & Ashford, S. J. (1994). Adaptive self regulation: A process view of managerial effectiveness. *Journal of Management*, 20(1), 93–113.
- Tubre, T. C., & Collins, J. M. (2000). Jackson and Schuler (1985) revisited: A meta-analysis of the relationships between role ambiguity, role conflict, and job performance. *Journal of Management*, 26(1), 155–169.
- Van Sell, M., Brief, A. P., & Schuler, R. S. (1981). Role conflict and role ambiguity: Integration of the literature and directions for future research. *Human Relations*, 34(1), 43–71.
- Vohs, K. D., & Baumeister, R. F. (2004). Understanding self-regulation. In R. F. Baumeister & K. D. Vohs (Eds.), *Handbook of self-regulation* (pp. 1–9). New York: Guilford.
- Whitaker, B. G., Dahling, J. J., & Levy, P. (2007). The development of a feedback environment and role clarity model of job performance. *Journal of Management*, 33(4), 570–591.
- Williams, L., & Anderson, S. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17(3), 601–617.
- Williams, J., & Johnson, M. (2000). Self-supervisor agreement: The influence of feedback seeking on the relationship between self and supervisor ratings of performance. *Journal of Applied Social Psychology*, 30(2), 275–292.

- Williams, M. L., Podsakoff, P. M., & Huber, V. (1992). Effects of group-level and individual level variation in leader behaviors on subordinate attitudes and performance. *Journal of Occupational and Organizational Psychology*, 65(2), 115–129.
- Yun, S., Takeuchi, R., & Liu, W. (2007). Employee self-enhancement motives and job performance behaviors: Investigating the moderating effects of employee role ambiguity and managerial perceptions of employee commitment. *Journal of Applied Psychology*, 92(3), 745–756.